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## **Barriers and facilitators to vaccination in pregnancy: a qualitative study in Northern Ireland, 2017**

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# Barriers to and facilitators of vaccination in pregnancy: a qualitative study in Northern Ireland, 2017

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# Background

- Influenza during pregnancy may result in serious complications for the mother and baby
- Increase in pertussis infections in infants in the UK in 2011/2012
- Vaccine uptake in pregnancy in Northern Ireland in 2015:
  - 59% for influenza
  - 63% for pertussis



# Aim and objectives

Our aim was to investigate the reasons for receiving or not receiving vaccination during pregnancy using a qualitative approach in order to

- describe the **knowledge** and
- investigate the **attitudes and beliefs** of pregnant women about vaccination in pregnancy
- describe possible practical **barriers** of pregnant women getting vaccinated
- identify ways to overcome barriers identified and to **increase vaccine uptake** in pregnancy

# Methods

- Developed discussion guide, consent form and participant information sheet within multidisciplinary group & service users
- Commissioned a market research company to recruit participants and facilitate focus groups and in-depth interviews
- Sampling: Opportunistic on-street recruitment of pregnant women
  - Including adult females, >16 weeks pregnant, vaccinated or not vaccinated and resident in Northern Ireland
  - Migrant background for in-depth interview
  - Excluding acquainted persons, participants of focus groups in the past 12 months

# Methods

- Phenomenological thematic analysis by two researchers independently via a six-step process using qualitative analysis software
  - Inductive coding of transcripts and comparison for agreement
  - Discussion to agree on key themes derived from the data and allocating codes
- Applying COnsolidated criteria for REporting Qualitative studies (COREQ):  
32-item checklist covering research team and reflexivity, study design, analysis and findings

# Results

- Data collected from 16 participants in three focus groups and one in-depth interview
- Mixture of age groups, number of children and social grade

	<b>Participants (n)</b>	<b>Vaccinated against influenza and/or pertussis</b>
Focus group 1	6	5 Yes / 1 No
Focus group 2	7	No
Focus group 3	2	Yes
Interview 1	1	Yes

# Results

## Identified Themes:

- Information and knowledge
- Influence of others
- Acceptance and trust
- Fear and distrust
- Responsibility for the baby
- Accessing vaccinations



# Information and knowledge

- Various sources of information (doctors, midwives, family, internet...)
- Active research and comparison of information
- Face-to-face discussions preferred
- Vaccinated were not necessarily more knowledgeable

**Speak to us more** instead of just giving you a leaflet, because no matter who you see, be it a doctor or a midwife, it's flooded with leaflets, **they are rushed** to get you in and out that door as quickly as possible. ...

[P2-FG3, vaccinated]

# Influence of others

- Strong influence of midwives
- Many would get vaccinated if recommended by healthcare professionals

..., my **midwives** weren't pushy or anything towards it. ...They **were quite laid back** about it all, and I think that's what made me laid back about it all. It's like it's **something not compulsory**, it's up to me to have it. No one was forcing me to make the appointments to have it, .... So **I didn't think that it was very important**, that it was a big deal to go and do it.

[P1-FG2, unvaccinated]

# Acceptance and trust

- Passive acceptance of vaccines
- Trust in healthcare professionals
- Lack of continuity of care
- “ignorance is bliss”

Sure the baby gets vaccinated anyway. So if you are going to have your child vaccinated does it matter if it's during pregnancy or not? **If it is that big of a risk, then they wouldn't offer it you.**

[P7-FG2, unvaccinated]

# Fear and distrust

- Fear of pain and early side effects (vaccinated participants)
- Concern about unknown longer-term consequences of the vaccine (unvaccinated participants)
- “Nature is best”
- Anti-vaccination views

I think I am inclined that if I definitely had to have a vaccination, then I wouldn't take it during pregnancy. **The chances of the baby being infected by the things in there**, the levels of mercury and aluminium, if that's ingested and the baby is going through a key development early on, it can affect their kidneys, liver, organs.

[P5-FG2, unvaccinated]

# Responsibility for the baby

- Being protective
- More important to vaccinate the baby than themselves
- Unvaccinated participants were concerned about protecting the baby from a vaccine they considered to be potentially harmful

That's why I went for it, because I had listened to so much information, and my gut was telling me so. **Because of the baby inside me**, I couldn't take the risk of anything happening and then me blaming myself, ... And I didn't really want to know anything else about it, because too much information was going to confuse me.

[P3-FG1, vaccinated]

# Accessing vaccination

- Most experienced no difficulties accessing vaccination
- Vaccination has not been offered
- Appointment has not been booked
- Inconvenience of attending GP for vaccination
- Lack of time, time off work, difficulty accessing childcare, responsibility of organising appointments

Like with me, I am just really lazy with these kinds of things. Like people say that you need to put an appointment on, but they don't push you, .... Like, I never really got round to making it the first time, so **what difference does it make this time?**

[P3-FG2, unvaccinated]

# Discussion

## Barriers

- Own responsibility to book appointment
- Inconvenient to attend GP
- Lack of time
- Time off work
- Access to childcare
- Concerns about side effects of vaccines

## Facilitators

- Offer vaccination and appointments
- Checklist and reminders
- Emphasise recommendation
- Explain and discuss vaccination
- Vital influential role of healthcare professionals
- Involve midwives

→ Strategies to develop interventions should address some of these barriers to meet the needs of pregnant women

# Limitations

- Small study size due to limited funding and timescales
- Participants from a small geographical area around Belfast
- Inclusion of an unvaccinated participant in one of the vaccinated groups might have influenced other participants
- We cannot be confident that data saturation was reached with respect to the views of immigrant women as only one woman was interviewed



# Conclusion

Our study highlights:

- the critical role of healthcare professionals, especially midwives, in recommending vaccination in pregnancy
  - the willingness of many unvaccinated women to be vaccinated
  - the need for a better approach to vaccination reminders, appointments and delivery
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- As a result of this study, we are exploring new approaches to vaccines being delivered by midwives in routine antenatal care appointments
  - We are conducting a quantitative study of the factors associated with vaccination in pregnancy

## Sources of funding

Supported by the Patient and Public Involvement (PPI) and Health Protection divisions of the Public Health Agency

## Ethical approval

Research ethics approval was obtained from the NHS Health Research Authority, West Midlands - Coventry & Warwickshire Research Ethics Committee (REC reference number 17/WM/0076) through its proportionate review process.

## Conflicts of Interest

None